
Product Name	DAVE™ 3
Release Version	v3.1.8
Type Of Release*	Productive
Name of the Supplier	Infineon Technologies AG
Mode of Release	Infineon Security Server, Update Sites and IShare
Date of Release	12.09.2013
Previous Version	v3.1.6 (Plug-in Update 2013-06-28)

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1 Released Items

1.1 Documents & Software

File Name	Version	Description
DAVE3_Release_Notes_v3_1_8.pdf	3.1.8	Release notes
DAVE3_Update_sites at below location:		DAVE 3 Update Sites
1. CE: http://dave.infineon.com/Eclipse/Update/Indigo/v3.1.8/CE	1.0.64	
2. IDE: http://dave.infineon.com/Eclipse/Update/Indigo/v3.1.8/IDE	1.0.50	
3. Debugger: http://dave.infineon.com/Eclipse/Update/Indigo/v3.1.8/Debugger	1.44.0	
4. xSPY: http://dave.infineon.com/Eclipse/Update/Indigo/v3.1.8/XSPY	1.1.6	
5. BMI: http://dave.infineon.com/Eclipse/Update/Indigo/v3.1.8/BMI	1.0.2	

Plug-in Versions of DAVE™ v3.1.8

Installed Software	Version	Update from previous version
DAVE3 CE	1.0.64.201309101730	Yes
DAVE3 IDE	1.0.50.201309061247	Yes
DAVE3 Library Manager	1.0.50.201309061247	Yes
DAVE3 MBS XMC4000	1.0.50.201309061247	Yes
DAVE3 Product Branding	1.0.64.201309101701	Yes
TASKING Debugger for DAVE3	1.44.0.0	No
xSPY	1.1.6	Yes
BMI	1.0.2	New

2 Support Packages

NA

3 Tool Information

The following are the tools used for the development and testing.

Tool Name	Eclipse
Tool Version	Indigo (eclipse 3.7)
JAVA	jre6 & product version 1.6.0_24
Platform	Windows XP, Windows Vista, Windows 7 – 32bit & 64-bit

4 Changes to Previous Version

4.1 Changes from previous version v3.1.6 (Plug-in Update 2013-06-28)

New Features Implemented in this release:

Id	Feature	Description	Status
28593	DAVE3 CE	DAVE Apps version migration feature - Apps in the project are migrated to latest version installed in the Library store	Supported
24091	DAVE3 CE	Device Migration inside the same series - Project migration support from current device to target device (Only devices of same series including steps are supported)	Supported
9870	DAVE3 CE	Conditional provided virtual signal	Supported
9924	DAVE 3 CE	Minimal version of required apps	Supported
14367	DAVE3 CE	Resource Reservation Feature	Supported
30160	DAVE3 CE	DAVE3 Network Configuration default setting "Direct"	Supported
16586	DAVE3 CE	Manual resource assignment dialog performance improvements	Supported
30062	DAVE3 CE	Solver timeout default value shall be 15 seconds	Supported
19721	DAVE3 CE	Add automatically the app version to generated code.	Supported
13691	DAVE3 CE	SW App Connectivity view: App Selection shows direct connected apps.	Supported
24655	DAVE3 CE	SW App Connectivity view : Preselect latest added app	Supported
24656	DAVE3 CE	Search function in the S/W App Dependency Tree view	Supported
24538	DAVE3 CE	S/W App Dependency Tree view: collapse all, expand all.	Supported
24275	DAVE3 CE	HW Connectivity view: Feature of showing connectivity tree of selected App	Supported
15466	DAVE3 CE	Solver execution during App instantiation "Window -> preferences -> Dave -> DAVE CE Preferences" option	Supported
15464	DAVE3 CE	Run solver after adding an app without reading back the results.	Supported
New	DAVE3 CE	The default location of the local Library store has been changed to: C:\Users\<user_name>\Infineon\D3LibraryStore_3.1.8 This DAVE-3.1.8 version works with only DAVE Apps library update site v1.0.50 or higher, not with older versions (see also section 5, Installation Requirements).	Updated

New	DAVE3 IDE	In the MCU target selection page new device steps of the XMC4500 series, XMC4400 series, XMC4200 series and XMC4100 series are added.	Supported
New	DAVE3 IDE	The linker script generation for the XC1000 family has been modified to support the optimization setting: remove unused sections.	Supported

List of Issues Fixed in this release:

Id	Issue	Description	Status
29697	DAVE3 CE	App selector doesn't show any apps after installation of Apps Library	Fixed
28667	DAVE3 CE	Manual Pin, Signal & Resource Assignment dialog combo box listing issue for big projects	Fixed
28684	xSPY	xSPY plug-in: Fix connection problems if project does not define a variable table	Fixed
28683	xSPY	xSPY plugin: Fix DBG002 version detection	Fixed
26024	DAVE3 CE	App Selection View inconsistent functionality for keywords.	Fixed
26726	DAVE3 CE	Double Project download selection and confirmation request	Fixed
29723	DAVE3 CE	Opening and closing CE perspective crash app selection view	Fixed

Other tools and CMSIS related changes:

Id	Changed Item	Description	Status
New	ARM® GCC	An updated version of ARM® GCC has been added. New version is 4.7 2013q2.	Supported
New	CMSIS device header file	New versions of CMSIS device header files for the XMC1000 family and for the XMC4400, 4200 and 4100 series. Please refer to the change history of the header files for details.	Supported
New	CMSIS DSP library	An updated build of the CMSIS DSP library has been added.	Supported
New	Eclipse CLP	Eclipse CLP, the tool for the resource solver has been updated to v6.1. As this update is also related the DAVE App /Device Description library, DAVE v3.1.8 requires DAVE Apps library update site v1.0.50 or higher (see also section 5, Installation Requirements).	Supported
New	Segger GUI library	A new version of the Segger GUI library has been included.	Supported
New	Installer setup	Installer setup.exe installs DAVE v3.1.8 as new instance and does not remove earlier DAVE versions.	Supported

4.2 Changes from previous version v3.1.6 (Plug-in Update 2013-05-30)

New Features Implemented in this release:

Id	Feature	Description	Status
27039	DAVE 3 IDE	Improved logging of networking problem during apps installation.	Supported

List of Issues Fixed in this release:

Id	Issue	Description	Status
26725	DAVE3 IDE	DAVE Apps download fails with Connection failed message	Fixed
26724	DAVE3 IDE	Network Connection right after installation to download DAVE Apps	Fixed

4.3 Changes from previous version v3.1.6 (Plug-in Update 2013-05-10)

New Features Implemented in this release:

Id	Feature	Description	Status
New	DAVE 3 xSPY	Data visualization tool XSPY is added	Supported
12205	DAVE 3 CE	Support to versioning system.	Supported
24608	DAVE 3 CE	Solver log: Failure reporting and time.	Supported
25421	DAVE 3 CE	Solver : Query failure returns all the resources	Supported
New	DAVE 3 CE	Solver timeout increased to 5 seconds	Supported

List of Issues Fixed in this release:

Id	Issue	Description	Status
3161048	DAVE 3 CE	Conditional App Consumption does not work; If DAVE is restarted after the Apps instantiation.	Fixed
25687	DAVE 3 CE	Apps are not removed from HW connectivity when deleted in SW connectivity	Fixed
25445	DAVE 3 CE	Project XML file (config.xml) wrong references	Fixed
25551	DAVE 3 CE	Manual Resource Assignment - Filter is not working properly	Fixed
25609	DAVE 3 CE	Solver Timeout value is incorrectly set.	Fixed
	DAVE 3 CE	Wrong instance numbers created at the time of app creation	Fixed

4.4 Changes from previous version v3.1.6 build 2013-02-25 (Installer Version)

New Features Implemented in this release:

Id	Feature	Description	Status
18937	DAVE 3 CE	Only one Eclipse Clp process shall be present.	Supported
9881	DAVE 3 CE & IDE	Provide DAVE App property information on right mouse click on the App	Supported
9889	DAVE 3 CE	Doxygen documentation generation support for DAVE projects	Supported
21834	DAVE 3 CE	Logging the time taken for code generation of templates (all templates logged)	Supported
21835	DAVE 3 CE	Pin allocator table view: available pin shall be ordered based on pad number.	Supported
16587	DAVE 3 CE	When solver fail don't delete the latest added constraint (Pin & Signal Connection tool)	Supported

List of Issues Fixed in this release:

Id	Issue	Description	Status
23981	DAVE 3 CE	No error message when solver fails.	Fixed
24443	DAVE 3 CE	Sometimes multiple solver eclipse processes are found	Fixed
24646	DAVE 3 CE	Wrong deletion of Software connectivity.	Fixed
25197	DAVE 3 CE	DAVE creates a null eco file in the DAVE/eclipse path	Fixed

4.5 Changes from previous version v3.1.4

New Features Implemented in this release:

Issue Id	Feature	Description	Status
13705	DAVE 3 IDE	Supported All XMC4000 and XMC1000 Devices. Supported Selecting Device Step option in new project wizard	Supported
22443	DAVE 3 IDE	Updated Copyright and Licensing Information in DAVE3 Help Section	Supported
13708	DAVE3 Library Manager	Installation speed Improvement for DAVE App Libraries & Example Projects	Supported
21535	DAVE 3 CE	Preprocessor define 'DAVE_CE' for compiler & assembler is added for all DAVE Code Engine Projects	Supported
21336	DAVE 3 CE	Preprocessor define 'UC_ID=SW_ID' for compiler & assembler is added for all DAVE Projects	Supported
21932	DAVE 3 CE	Signal Connection Dialog User interface Usability Improved for Big Projects	Supported

15524	DAVE 3 CE	Manual Pin Assignment User interface Usability Improved for Big Projects	Supported
21831	DAVE 3 CE	Updated DAVE User Manual	Supported
15603	DAVE 3 CE	DAVE3 Tool & Apps Error Reporting: In problem view user messages are reported. In workspace .log file all messages are logged	Supported
19529	DAVE 3 CE	All solver query timeouts changed to 1 sec.	Supported
15439	DAVE 3 CE	Faster processing of solver results	Supported
17465	DAVE 3 CE	DAVE Application model optimization for Speed & size	Supported
13631	DAVE 3 CE	Code Generation speed improvement. Further speed improvement in Code regeneration by caching template java classes.	Supported
13637	DAVE 3 CE	Option in DAVE menu to clear cached code generator template java classes	Supported
15599	DAVE 3 CE	Code Generation: Delete only generated files during re-generation process (speed improvement)	Supported
DB-124	DAVE3 MBS	Added XMC1000 support to MBS	Supported
DB-129	DAVE3 MBS	Update linker script templates XMC1000 family	Supported
DB-130	DAVE3 MBS	Add support for the ARM GNU print size tool	Supported
DB-131	DAVE3 MBS	Replaced the tool reference from XMC4000 to XMC, since support for the XMC1000 is added as well	Supported
DB-135	DAVE3 MBS	Added common CMSIS Infineon Include and Lib paths	Supported
DB-124	Tasking Debugger	Added XMC1000 debugger support with J-Link	Supported
DB-139	Tasking Debugger	Updated XML SFR files of XMC4000 Family	Supported
DB-141	Tasking Debugger	Added support for Boot Kit for XMC1100, XMC1200 and XMC1300	Supported
DB-142	Tasking Debugger	Added support for XMC1100, XMC1200 and XMC1300 devices	Supported
DB-143	Tasking Debugger	Added support for XMC4100 devices	Supported

List of Issues Fixed in this release:

Id	Issue	Description	Status
20242	DAVE 3 CE	Code Generation Issue: Some files are not generated.	Fixed

21985	DAVE 3 CE	App defined Project Include Paths: App defined Include path are not added again if manually removed by user	Fixed
19976	DAVE 3 CE	S/W App Connectivity View: SW dependency connections are not shown for some projects	Fixed
22624	DAVE 3 CE	User added project include paths are removed after code generation.	Fixed
20238	DAVE 3 CE	DAVE Support app not added in a new project which results in compilation issue.	Fixed
18867	DAVE 3 CE	Error message not displayed incase device descriptions are missing for selected device during project creation	Fixed
17042	DAVE 3 CE	In big project having many apps unable to select pin allocation	Fixed
17794	DAVE 3 Library Manager	Incomplete download/update of App & example projects & library store corruption	Fixed
DB-128	Tasking Debugger	Debugger crashes now and then after a re-launch	Fixed
DB-132	Tasking Debugger	Debugger cannot reload ELF file while target is running	Fixed

4.6 Changes from previous version v3.1.2

New Features Implemented in this release:

Issue Id	Feature	Description	Status
12196	DAVE 3 CE	Manual Resource reservation & allocation support	Implemented
9895	DAVE 3 CE	HW Connectivity & SW Dependency as separate views.	Implemented
New	DAVE 3 IDE	C++ Support	Implemented
New	DAVE 3 IDE	Enable CCACHE to speed up re-compilation	Implemented
15681	DAVE 3 CE	Code generation provides following options, In case of no changes in configuration, <ul style="list-style-type: none"> Cancel code generation Solve and re-generate code re-generate code without invoking solver 	Supported
AI00067859	DAVE 3 CE	Updates availability check shall be by default enabled	Supported
AI00073327	DAVE 3 CE	Support for DAVE Apps to include or exclude Library from build conditionally.	Supported

List of Issues Fixed in this release:

Id	Issue	Description	Status
AI00066224	DAVE 3 CE	DAVE 3 Code Generation affecting MBS every time	Fixed
AI00067495	DAVE 3 CE	DAVE App UI : White background for enabled fields in	Fixed
AI00066216	DAVE 3 CE	DAVE CE Perspective Search option is missing	Fixed
12195	DAVE 3 CE	Deleting of required apps based on the User preference	Fixed
12196	DAVE 3 CE	Manual pin assignment: include previous pin constraint in feasibility query	Fixed
12203	DAVE 3 CE	App tree view: multiple selection of top Apps	Fixed
12371	DAVE 3 CE	Add to help menu direct link to Dave Forum	Fixed
12187	DAVE 3 CE	Manual Pin Assignment View :all pad resources should be visible.	Fixed
12189	DAVE 3 CE	Avoid need of a windows environment variable (ECLIPSEDIR) for the solver	Fixed
12198	DAVE 3 CE	Cancel button during code generation.	Fixed
12176	DAVE 3 CE	Warning message to be shown for Apps which are not able to be instantiated due to SWID Missing, App not Installed..	Fixed
15031	DAVE 3 CE	Removal of previous constraint is not considered in the Manual Pin Assignment	Fixed
17150	DAVE 3 IDE	GUI Active page refreshment after solver run	Fixed

4.7 Changes from previous version v3.1.0

New Features Implemented in this release:

Issue Id	Feature	Description	Status
AI00065680	App Project Import	<ul style="list-style-type: none"> Function to import an example project from the local library Check for DAVE App Updates & "Uninstall DAVE App/Example Library" as separate menu items in Help Menu 	Supported
AI00065585	Manual Pin Mapping	"Solve & Save" Functionality added in place of "Save"	Supported
AI00064965	Signal Connection UI	Signal connectivity UI enhancement: output signals only need to be displayed in the third column	Supported
AI00066032	Report	Sharable & Singleton fields in Report ->Apps tab	Supported

New Feature	emWin Library	Segger™ emWin GUI library is provided in the DAVE™ 3 Installation folder	Supported
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List of Issues Fixed in this release:

Id	Issue	Description	Status
Issue 1	IDE & MBS	Build error ("The input line is too long") when the project contain many source files. Eclipse CDT Bugzilla Issue. (CDT Patch for this issue available)	Fixed
Issue 2	CMSIS Folder	Start-up files update with doxygen comments	Fixed
AI00067291	App Dependency	App dependency view is not updated after close /reopen project workspace (condition App consumption feature)	Fixed
Issue 3	Project Import	Import project feature is not working for some DAVE v3.1.0 created projects	Fixed
AI00066365	DAVE MS & Support App	Device description peripheral version changes are incorrectly handled in DAVE MS & Support App.	Fixed
AI00066305	Signal Connection	Dave 3.1.2: Signal Connection dialog: "Solve & Save" successfully but no connection.	Fixed
Issue 4	Report/Signal Assignment	lists all the connections defined in Manifest even for conditional connections	Fixed
MCSW300000211	DAVE 3 Help Menu	Change writing style of DAVE 3 in Help menu and in About DAVE 3	Fixed
AI00065666	DAVE3 Apps UI	Error message when User Interface parameters overflow/underflow	Fixed
AI00065517	App Dependency	Error: when required App have different version in project and in the repository	Fixed
AI00065293	Project copy-paste/rename	Project paths when copy-paste/rename performed by user	Fixed
Issue 5	Debugger	In the memory view it is not possible to change the content of SFR registers.	Fixed
Issue 6	Debugger	Project with high optimizations cannot be downloaded	Fixed
Issue 7	Debugger	In SFR View: <ul style="list-style-type: none"> In a Register array only the first element is shown Some registers for e.g. EXICON and EXOCON registers are missing 	Fixed
Issue 8	Device Description Installation	Multiple versions of Device Description Installation were incorrectly handled.	Fixed

List of Known Issues:

- refer section 6

5 Installation Requirements

- As per Instructions provided during DAVE™ 3 Installer.
- Starting with DAVE-3.1.8, maintaining parallel installations of DAVE is supported.
- DAVE v3.1.8 requires a DAVE App library update site version 1.0.50 or higher.

Please refer the Installation procedure for the details.

6 List of known Issues

Module	Fault Id	Description	Work Around
DAVE Example projects import	Known Issue	DAVE Example projects import showing multiple projects getting active in some cases.	Select one project -> right click & select "Set Active Project" setting.
DAVE Project Management	Known Issue	Refresh of project is necessary before deleting/renaming/paste a project	Refresh Project (File ->Refresh)
App Library Uninstallation	Known Issue	Apps Library Un-installation removes the Library, not the Apps	This is observed only in one-off cases. No workaround for this issue
App Library Uninstallation	Known Issue	Un-Install Libraries dialog goes blank after Apps Library Installation/Un-Installation	This is observed only in one-off cases. No workaround for this issue
App Library Installation	Known Issue	Library Store Software Id index file is corrupted after Apps Library updates. No Apps are shown in App selection view.	This is observed only in one-off cases. Workaround is to create new Library store & refer this in DAVE preferences
App Library Installation	Known Issue	DAVE Apps download fails with Connection failed message	Workaround: Retry Download/Update of Apps

Network configuration	Known Issue	Network configuration right after installation to download DAVE Apps	<p>In some networks eclipse will prompt connection problems. In this case change the connection preferences as shown below:</p> <ol style="list-style-type: none"> 1. Click "Window" , "Preferences", >General >Network Connections 2. Active Provider set as "Native" <p>Retry Installation of DAVE Apps/Example Projects</p> <p>or</p> <p>Download the DAVE App Libraries zip file and Install from local path.</p> <p>DAVE App Libraries Link</p>
Tasking Debugger	Known Issue	Debugger unable to start for below scenario : A Project that has a reference to a linked folder and when creating the link the option "Create virtual folders" is checked	No workaround (Eclipse Platform Issue)
DAVE Migration	Known Issue	During Device Migration, There may be an pop-up message about the Resource mapping failure.	This is observed only in one-off cases. Workaround is to run solver / do Device Migration again.

6.1 DAVE Migration feature

6.1.1 Apps Migration – IO002 Pad Speed class inclusion in solver query

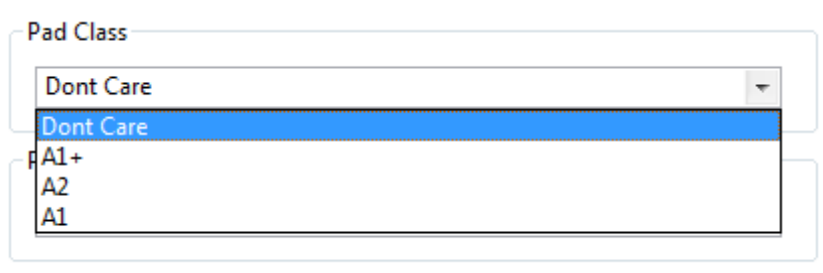
Problem Description:

The old version of the IO002 Apps has the pad speed class selection with A1 as default and the selection was not included for the solver query. However, the new version includes the pad speed class selection to the solver query. This may lead to solver error condition.

Example: Apps which consumes IO Apps, like CAN Examples, Motor control Examples (latest published examples)

How to solve the solver error with pad speed class?

User should review IO002 App to change the pad class selection to appropriate class type which is supported by the device. The Pad Speed Class selection UI control is shown below,



This will solve the issue for the IO Apps which has the output mode configured.

6.1.2 Device Migration – The selected Target device doesn't have user-assigned pins

Problem Description:

Device Migration will report when the user-assigned port pins are not available in the selected Target device.

How to change the project to migrate to selected device?

User should review the user-defined configurations such as Manual PIN Assignment and Hardware Resource Assignment dialogs and then update it to "Not selected" and do Solve & Save. This will help the solver to assign the available resource in the selected device.

6.1.3 Apps Migration – Library ordering for Linker

Problem Description:

As the Apps Migration creates the new version of the Apps, copy the values and generates the code, The Library ordering for linker need to be taken care as like new project creation with Library inclusion from the Apps.

How to avoid the build errors due to the library ordering change?

User should review "Active Project Settings → Tool Settings → ARM-GCC C Linker → Libraries", and then change desired order manually as explained in the Apps help document.

6.1.4 Apps Migration – Required App changed from IO002 → IO004

Problem Description:

The version increment of App changes the required App from IO002 to IO004. The Apps Migration will report it as missing App in the new version and will instantiate the new Apps with default values as required by new version of the top level App.

How to get the working state of the project?

User should take care of configuring the new App with desired values.

6.1.5 Apps Migration – UI data copy: UI Difference

Problem Description:

As the Apps Migration creates the new version of the Apps, copies the values and generates the code, UI value copied from old version to new version may be incorrect for some cases like parameter-to-parameter dependency.

How to correct the UI value?

User can review and change it to the required value as in the original project.

6.1.6 Apps Migration – Apps increment with API signature change

Problem Description:

There is some Apps update with a change in provided APIs, The Apps Migration will give the error if the project used the APIs in the Application code.

How to correct the build error?

User should review the application code and modify the API calls accordingly.

7 Violations

NA

8 List of Limitations and Deviations

The following table summarizes the most important limitations and deviations with respect to the Specification.

Module	Limitation / Deviation